

Substitute for form 1449A/PTO

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1

of 5

Application Number	10/611,805
Filing Date	June 30, 2003
First Named Inventor	Sun, et al.
Group Art Unit	1742
Examiner Name	Nira S. Birenbaum
Attorney Docket Number	APPM/006877/PPC/CMP/CKIM
Submission Date	November 21, 2005

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
MP9	A1	US-3,162,588	12/22/1964	Bell	
	A2	US-3,448,023	6/3/1969	Bell	
	A3	US-4,396,467	8/2/1983	Anthony	
	A4	US-4,466,864	8/21/1984	Bacon, et al.	
	A5	US-4,496,436	1/29/1985	Inoue	
	A6	US-4,789,437	12/6/1988	Sing, et al.	
	A7	US-4,839,005	6/13/1989	Katsumoto, et al.	
	A8	US-4,869,971	9/26/1989	Nee, et al.	
	A9	US-4,956,056	9/11/1990	Zubatova, et al.	
	A10	US-5,032,238	7/16/1991	Ishimura, et al.	
	A11	US-5,039,381	8/13/1991	Mullarkey	
	A12	US-5,096,550	3/17/1992	Mayer, et al.	
	A13	US-5,114,548	6/19/1992	Rhoades	
	A14	US-5,141,602	8/25/1992	Chen, et al.	
	A15	US-5,156,730	10/20/1992	Bhatt, et al.	
	A16	US-5,217,586	6/8/1993	Datta, et al.	
	A17	US-5,256,565	10/26/1993	Bernhardt, et al.	
	A18	US-5,340,370	8/23/1994	Cadien, et al.	
	A19	US-5,503,730	4/2/1996	Osano, et al.	
	A20	US-5,522,965	6/4/1996	Chisholm, et al.	
	A21	US-5,567,300	10/22/1996	Datta, et al.	
	A22	US-5,637,031	6/10/1997	Chen	
	A23	US-5,637,185	6/10/1997	Murarka, et al.	
	A24	US-5,664,990	9/9/1997	Adams, et al.	
	A25	US-5,683,538	11/4/1997	O'Neill, et al.	
	A26	US-5,705,230	1/6/1998	Matanabe, et al.	
	A27	US-5,738,574	4/14/1998	Tolles, et al.	
	A28	US-5,807,165	9/15/1998	Uzoh, et al.	
	A29	US-5,827,435	10/27/1998	Samukawa	

Examiner

Date Considered

2-5-2006

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Sheet

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		Number-Kind Code ² (if known)			
M/1	A30	US-5,846,398	12/8/1998	Carpio	
	A31	US-5,885,469	3/23/1999	Kholodenko, et al.	
	A32	US-5,911,619	6/15/1999	Uzoh, et al.	
	A33	US-5,972,192	10/26/1999	Dubin, et al.	
	A34	US-6,004,880	12/21/1999	Liu, et al.	
	A35	US-6,010,964	1/4/2000	Glass	
	A36	US-6,027,630	2/22/2000	Cohen	
	A37	US-6,056,864	5/2/2000	Cheung	
	A38	US-6,066,030	5/23/2000	Uzoh	
	A39	US-6,071,388	6/6/2000	Uzoh	
	A40	US-6,090,239	7/18/2000	Liu, et al.	
	A41	US-6,143,155	11/7/2000	Adams, et al.	
	A42	US-6,176,992	1/23/2001	Talieh	
	A43	US-6,203,684	3/20/2001	Taylor, et al.	
	A44	US-6,234,870	5/22/2001	Uzoh, et al.	
	A45	US-6,248,222	6/19/2001	Wang	
	A46	US-6,251,235	6/26/2001	Talieh, et al.	
	A47	US-6,258,220	7/10/2001	Dordi, et al.	
	A48	US-6,261,433	7/17/2001	Landau	
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	A50	US-6,315,883	11/13/2001	Mayer, et al.	
	A51	US-6,328,872	12/11/2001	Talieh, et al.	
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	A53	US-6,355,153	3/12/2002	Uzoh, et al.	
	A54	US-6,379,223	4/30/2002	Sun, et al.	
	A55	US-6,386,956	5/14/2002	Sato, et al.	
	A56	US-6,391,166	5/21/2002	Wang	
M/1	A57	US-6,395,152	5/28/2002	Wang	

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12-6-2006

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		Number-Kind Code ² (if known)			
M/A	A58	US-6,409,904	6/25/2002	Uzoh, et al.	
	A59	US-6,432,282	8/13/2002	Shamouilian, et al.	
	A60	US-6,440,495	8/27/2002	Wang	
	A61	US-6,471,847	10/29/2002	Talieh, et al.	
	A62	US-6,482,307	11/19/2002	Ashjaee, et al.	
	A63	US-6,497,800	12/24/2002	Talieh, et al.	
	A64	US-6,630,059	10/7/2003	Uzoh, et al.	
	A65	US-6,726,823	4/27/2004	Wang, et al.	
	A66	US-6,749,728	6/15/2004	Wang	
	A67	US-2001/0035354	11/1/2001	Ashjaee, et al.	
	A68	US-2001/0036746	11/1/2001	Sato, et al.	
	A69	US-2001/0040100	11/15/2001	Wang	
	A70	US-2001/0042690	11/22/2001	Talieh	
	A71	US-2002/0008036	1/24/2002	Wang	
	A72	US-2002/0011417	1/31/2002	Talieh, et al.	
	A73	US-2002/0020621	2/21/2002	Uzoh, et al.	
	A74	US-2002/0070126	6/13/2002	Sato, et al.	
	A75	US-2002/0072309	6/13/2002	Sato, et al.	
	A76	US-2002/0088715	7/11/2002	Talieh, et al.	
	A77	US-2002/0160698	10/31/2002	Sato, et al.	
	A78	US-2003/0104762	6/5/2003	Sato, et al.	
	A79	US-2003/0114004	6/19/2003	Sato, et al.	
M/A	A80	US-2004/0050817	3/18/2004	Sun, et al.	

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FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ² -Number ³ -Kind Code ⁴ (if known)				
MPA	B1	EP 0 455 455	11/6/1991	Miller, et al.		
MPA	B2	EP 0 738 561	10/23/1996	Birang, et al.		
MPA	B3	EP 0 905 754 (English Abstract)	3/31/1999	Dipl-ing, et al.		X
MPA	B4	JP 11 238703 (English Abstract)	8/31/1999	Kazuyoshi		X
MPA	B5	JP 01-77117 (English Abstract)	3/23/2001	Takeshi, et al.		X
MPA	B6	JP 53-37543 (English Abstract)	4/6/1978	Niro, et al.		X
MPA	B7	WO 98/49723	11/5/1998	Kaisaki, et al.		
MPA	B8	WO 99/25905	5/27/1999	Patton, et al.		
MPA	B9	WO 99/26758	6/3/1999	Weihs, et al.		
MPA	B10	WO 99/53119	10/21/1999	Wang		
MPA	B11	WO 99/54527	10/28/1999	Landau		
MPA	B12	WO 99/65072	8/31/1999	Adams, et al.		
MPA	B13	WO 00/03426	1/20/2000	Wang		
MPA	B14	WO 00/26443	5/11/2000	Talieh		
MPA	B15	WO 00/59682	10/12/2000	Talieh, et al.		
MPA	B16	WO 01/88229	11/22/2001	Wang, et al.		
MPA	B17	WO 02/23616	3/21/2002	Wang		

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NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
MLU	C1	Contolini, et al., "Electrochemical Planarization of ULSI Copper", Solid State Technology, June 1997, pp. 155-161, Vol. 40, No. 6, Cowan Pub. Corp., Washington, USA.	
MLU	C2	European Search Report from EP 00 31 0358, Dated 10 October 2001.	
MLU	C3	Nogami, "An Innovation to Integrate Porous Low-K Materials and Copper", <u>Interconnect Japan 2001</u> ; Honeywell Seminar (December 6, 2001), pages 1 - 12.	
MLU	C4	Padhi, et al., "Planarization of Copping Thin Films by Electropolishing in Phosphoric Acid for ULSI Applications" Journal of the Electrochemical Society, 150(1) (2003) pp. G10-G14.	
MPA	C5	Partial European Search Report for EP 00 31 0560, dated December 12, 2003. (AMAT/003907)	
MPA	C6	Yu, et al. Appl. Phys. Lett., "Dishing Effects in a Chemical Mechanical Polishing Planarization Process for Advanced Trench Isolation", September 14, 1992, pp. 1344-1346.	

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